

AMENDMENTS

In the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of detecting a focal length, ~~which calls for~~
comprising:
 - obtaining, while changing the focal length of an optical system, multiple image data selected from among image data ~~consisting of~~ including brightness data and a plurality of color data; and
 - calculating a focal length from the obtained multiple image data by using ~~[[the]]~~ a peak value of contrast evaluated values of said multiple image data.
2. (Currently Amended) A method of detecting a focal length as claimed in claim 1,
~~wherein:~~ further comprising
 - weighting ~~[[of]]~~ the evaluated values of each image data of each respective color data that has been selected is automatically performed based on conditions set for said each image data.
3. (Canceled)
4. (Currently Amended) A method of detecting a focal length as claimed in claim 1,
~~wherein:~~ further comprising
 - providing a photographing mode for calculating a focal length by using only image data that consists of color data of a specific color selected based on a subject ~~is provided~~.
5. (Currently Amended) A method of detecting a focal length as claimed in ~~any one of the claims from~~ claim 1, 2 or 4 to claim 4, ~~wherein:~~ further comprising
 - emitting auxiliary light with given color data ~~is emitted~~ when the image data is obtained, and performing weighting of the evaluated values of the color image data ~~is performed~~ based on the color data of the emitted auxiliary light.

6. (Currently Amended) A method of detecting a focal length as claimed in ~~any one of the claims from claim 1, 2 or 4 to claim 5, wherein:~~ further comprising

~~the method calls for~~ setting a plurality of image detecting areas adjacent to one another in each one of the obtained multiple image data, calculating a partial focal length for each image detecting area based on which image data the peak value of contrast evaluated values has been recorded in, calculating the reliability of each image detecting area based on the position at which said peak value has been recorded moving across the multiple image data, and

selecting a focal length from a group consisting of said partial focal lengths and at least one given focal length, said focal length selected based on the reliability and the evaluated values of each respective image detecting area.

7. (Currently Amended) A focusing device, ~~including~~ comprising:

an image pickup device,

an optical system for forming an image on said image pickup device,

an optical system ~~driving means~~ driver for changing the focal length of said optical system, and

an image ~~processing means~~ processor for processing image data output from said image pickup device and controlling said optical system ~~driving means~~ driver, wherein[[:]]

the image ~~processing means~~ processor is adapted to:

while changing the focal length of said optical system, obtain multiple image data selected from among image data of brightness data and a plurality of color data, and

calculate a focal length from the obtained multiple image data by using the peak value of contrast evaluated values of said multiple image data.

8. (Original) A focusing device as claimed in claim 7, wherein:

the focusing device is provided with an operating means which enables the operator to perform by the operator's discretion weighting of the evaluated values of each image data of each respective color data that has been selected.

9. (Currently Amended) A focusing device as claimed in claim 7, wherein:

the image ~~processing means~~ processor is adapted to automatically perform weighting of the evaluated values of each image data of each respective color data that has been selected based on conditions set for said each image data.

10. (Currently Amended) A focusing device as claimed in ~~any one of the claims from claim 7 to claim~~ claim 7, 8 or 9, wherein:

the focusing device is provided with an auxiliary light device for emitting light with given color data.

11. (Currently Amended) A focusing device as claimed in ~~any one of the claims from claim 7 to claim 10~~ claim 7, 8 or 9, wherein:

the image ~~processing means~~ processor is adapted to:

set a plurality of image detecting areas adjacent to one another in each one of the obtained multiple image data, calculate a partial focal length for each image detecting area based on which image data the peak value of contrast evaluated values has been recorded in, calculate the reliability of each image detecting area based on the position at which said peak value has been recorded moving across the multiple image data, and

select a focal length from a group consisting of said partial focal lengths and at least one given focal length, said focal length selected based on the reliability and the evaluated values of each respective image detecting area.

12. (Currently Amended) An image capturing method, ~~which calls for~~ comprising:

using color data of a plurality of colors to detect a focal length for each respective color data and capturing an image at each focal length detected for each respective color data.

13. (Currently Amended) An image capturing method as claimed in claim 12, ~~wherein~~ further comprising:

simultaneously selecting a plurality of photographing modes can be selected, and ~~should~~ a plurality of photographing modes be simultaneously selected, detecting focal lengths are

~~detected~~ for each one of the selected photographing modes by using color data of a plurality of colors, and capturing images ~~are captured~~ at the respected focal lengths that have been detected.

14. (Currently Amended) An image capturing method as claimed in claim 12 or ~~claim~~ 13, wherein:

the detecting of the focal length ~~detection calls for~~ comprises:

obtaining a plurality of image data of each respective color data while changing the focal length of an optical system,

setting a plurality of image detecting areas adjacent to one another for the image data of each color data,

calculating a partial focal length for each image detecting area based on which image data the peak value of contrast evaluated values has been recorded in,

calculating the reliability of each image detecting area based on the position at which said peak value has been recorded moving across the multiple image data, and

selecting a focal length from a group consisting of said partial focal lengths and at least one given focal length, said focal length selected based on the reliability and the evaluated values of each respective image detecting area.

15. (Currently Amended) An image capturing apparatus, ~~including~~ comprising:

an image pickup device,

an optical system for forming an image on said image pickup device,

an optical system ~~driving means~~ driver for changing the focal length of said optical system, and

an image ~~processing means~~ processor for processing image data output from said image pickup device and controlling said optical system ~~driving means~~ driver, wherein:

the image ~~processing means~~ processor is adapted to:

obtain a plurality of image data of each respective color data while changing the focal length of said optical system, and

calculate a focal length for each respective color data mentioned above by using the peak value of contrast evaluated values calculated from the obtained multiple image data; and

perform image capturing at each focal length calculated for each respective color data.

16. (Currently Amended) An image capturing apparatus as claimed in claim 15,

~~wherein:~~

~~the apparatus is provided with~~ further comprising a warning ~~means~~ device for indicating that image capturing is underway.